

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **09301705 A**

(43) Date of publication of application: **25.11.97**

(51) Int. Cl

**C01B 15/029
B01J 23/40
B01J 23/44**

(21) Application number: **08123513**

(22) Date of filing: **17.05.96**

(71) Applicant: **MITSUBISHI GAS CHEM CO INC**

(72) Inventor: **NAGASHIMA HIROMITSU
KATO TOMIO
KAWAKAMI MICHIIYA
TAKAGI NAOFUMI**

(54) PRODUCTION OF HYDROGEN PEROXIDE

(57) Abstract:

PROBLEM TO BE SOLVED: To produce H₂O₂ high in conc. under low pressure with high hydrogen selectivity by using a specified catalyst when H₂O₂ is produced by catalytically reacting O₂ with H₂ in a reaction medium.

SOLUTION: The catalyst used is prepared by depositing titania and platinum group metal (e.g. Pd) on a carrier preferably comprising silica or alumina, or by depositing titania on a carrier and further depositing

platinum group metal. Titania is preferably obtd. by hydrolyzing titanium alkoxide (e.g. ortho ethyl titanate) as the source material to obtain titanium hydroxide, depositing the abtd. titanium hydroxide on the carrier surface, and calcining preferably at 300 to 1,000°C. H₂O₂ is produced by catalytically reacting H₂ with O₂ in a reaction medium which is a soln. containing acid (e.g. phosphoric acid) and halide (NaBr) in the presence of the catalyst at the pressure of 0.1 to 2MPa.

COPYRIGHT: (C)1997,JPO